

From: McKernan, John
Sent: Monday, August 31, 2015 12:27 PM
To: Burns, Betsy; Coleman, Charles
Cc: Hoogerheide, Roger; Butler, Barbara; Gervais, Gregory
Subject: FW: East Helena (lead) and Anaconda (copper) Smelter slag piles..

Hi Betsy and Charlie-

We greatly appreciate the tours of both of your sites while we were out in Montana. Beautiful areas, but with gigantic lead and copper slag piles sitting in them...

I did some leg work with OSWER and other folks on my end – apologies for it taking a while. What I found might be helpful to you both, as it applies to the large slag piles you both have on site.

It appears that by the Bevill Exemption and numerous court decisions, your slag piles are likely exempt from the RCRA hazardous waste rule. See: <http://www.epa.gov/wastes/nonhaz/industrial/special/mining/index.htm>

Plainly stated, slag from primary copper processing, and primary lead processing are covered under the mining waste exclusion, and exempt from federal hazardous waste regulations under Subtitle C of the Resource Conservation and Recovery Act (RCRA).

There are a number of EPA documents redirecting practitioners to do contradictory things with these wastes in order to dispose of them, thereby confusing the issue of the applicability of the Bevill Exemption to these wastes. After reviewing a few of these confusing documents, the gist of them is, 'be responsible in determining the long-term storage/disposal of this material'. My first thought with the slags you have at your sites is for beneficial reuse. The slag is durable and stable, and there appear to be a number of potential beneficial uses of the material. If you can find a vendor to take the slags, it would be worthwhile investigating the use of them in concrete, asphalt or other durable material. Using your slags in the aforementioned materials should not alter their required engineering and structural properties which may require some testing. I think another important aspect is TCLP testing of the product in which the slags are used to ensure the final product does not exceed TCLP limits for RCRA hazardous waste. If the final product passes the TCLP test (that is, the RCRA Hazardous Waste test), I would think that you could use the slags in those products.

I'm not a lawyer, so I'd check all this information with your Regional Attorneys. At first glance, it does appear your slag piles fit nicely into the information outlined on the webpage provided, and as potential aggregates for a number of durable products. The aesthetics of some of these durable products might actually prove to be desirable. Slag use in roadbed asphalt wouldn't change the general appearance of a road, but the use of the Anaconda slag in concrete or cinderblock (for example) might provide a striking look without the need for coloring – Solid Black Concrete or Solid Black Blocks.

Hope this information is helpful, and please feel free to contact me with any questions or comments.

Thank you,

John McKernan
Engineering Technical Support Center ([ETSC Internet site](#))
Technical Support Request SharePoint site
Office: 513.569.7415 | Mobile: 513.284.9717 | Fax: 513.569.7676
McKernan.John@epa.gov

U.S. EPA | ORD
26 W. Martin Luther King Dr., MS 489A
Cincinnati, OH 45268

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